REMARKS

Summary of the Office Action

Claims 1-13 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claims [not specified by the Office Action at line 1 of section 3 on page 3] stand rejected under 35 U.S.C. § 102(b) as being anticipated by Shigemori (hereinafter "Shigemori"). The Examiner makes no indication of specifically what document number or document type "Shigemori" is intended to refer to. Applicants are proceeding with the understanding that the Examiner intended to refer to U.S. Patent No. 6,400,673. To the extent that Applicants understanding is incorrect, clarification is requested n the next Office Communication.

Claims 1-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by EP 1207525 (hereinafter "EP 525"). Applicants note that the U.S. equivalent of EP 525 is U.S. Patent No. 6,664,526.

Summary of the Response to the Office Action

Applicants have amended claims 1, 3 and 10-13, and added new claims 14-17 to differently describe embodiments of the disclosure of the instant application's specification and/or to improve the form of the claims. Accordingly, claims 1-17 are currently pending for consideration.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 1-13 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicants have amended claims 1, 3 and 10-13 in light of the Examiner's comments at pages 2-

3 of the Office Action. Applicants respectfully submit that the claims, as amended, fully comply with the requirements of 35 U.S.C. § 112, second paragraph. Accordingly, Applicants respectfully request that the rejections under 35 U.S.C. § 112, second paragraph be withdrawn.

Rejections under 35 U.S.C. § 102(b) and 103(a)

Claims stand rejected under 35 U.S.C. § 102(b) as being anticipated by Shigemori. Claims 1-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by EP 525. Applicants have amended claims 1, 3 and 10-13 to differently describe embodiments of the disclosure of the instant application's specification. To the extent that these rejections might be deemed to apply to the claims as newly-amended, they are respectfully traversed for at least the following reasons.

Newly-amended independent claim 1 describes an advantageous combination of features in which an emission device emits a light beam to the optical recording medium by switching between a multi-pulse beam consisting of a plurality of pulsed lights and a single pulse beam consisting of a single pulsed light depending on the data, and depending on whether a recording period is a predetermined period.

In other words, the emission device described in newly-amended independent claim 1 emits a write beam of the multi-pulse beam at the time of forming a mark of the data, and it emits an erase beam at the time of forming a space of the data. In addition, the emission device emits the erase beam of the single pulse beam during the predetermined period, and it emits the erase beam of the multi-pulse beam during a period other than the predetermined period.

In accordance with the advantageous combination of features described in independent claim 1 of the instant application, a write beam of the multi-pulse beam is emitted at the time of

forming a mark of the data, and an erase beam of the multi-pulse beam is emitted at the time of forming a space of the data. This arrangement is particularly advantageous because it prevents the accumulation of heat in a recording medium. Further, the erase beam of the single-pulse beam is emitted during a predetermined period in order to facilitate the acquisition or sampling of the level intensity of a light beam during the predetermined period at the time of forming a space of the data. The features of newly-amended independent claim 1 are based on the disclosure in the instant application, for example, in Figs. 2A and 5 and the related portions of the specification.

Applicants respectfully submit that Shigemori discloses in Fig. 3 that a laser beam P emitted at the time of forming a mark of an information code C is multi-pulsed (period "b"). As is evident from Fig. 3 of Shigemori, however, a laser beam P emitted at the time of forming a space of information code C is not multi-pulsed, but instead is a single pulse (period "a").

On the other hand, independent claim 1 of the instant application specifically describes that a write beam of the multi-pulse beam is emitted at the time of forming a mark of the data, and an erase beam of the multi-pulse beam is emitted at the time of forming a space of the data.

Accordingly, Applicants respectfully submit that independent claim 1 and Shigemori are particularly different from each other in at least with regard to the above point.

Concerning the differences between claim 1 and Shigemori, Applicants respectfully submit that the Examiner might allege that claim 1's feature of an erase beam of the multi-pulse beam being emitted at the time of forming a space of the data, while not disclosed in Shigemori, is obvious over Shigemori, because Shigemori discloses that a laser beam P emitted at the time of forming a mark of information code C is multi-pulsed (period "b"). If such an allegation is

made by the Examiner, Applicants would respectfully traverse it for at least the following reasons.

Applicants respectfully submit that newly-amended independent claim 1 includes a combination of advantageous features that further includes a description that the erase beam of the single-pulse beam is emitted during a predetermined period. Applicants respectfully submit that this feature of claim 1 is not disclosed, or even suggested, in Shigemori.

Accordingly, Applicants respectfully submit that newly-amended independent claim 1 of the instant application is not anticipated by Shigemori and is not obvious over Shigemori.

Applicants respectfully submit that EP 525 discloses that in Figs. 1B, 1C, and 1D, an LD (Laser Diode) light emission emitted at the time of forming a mark of recording data (EFM pulse) is multi-pulsed. As is apparent from Figs. 1B, 1C, and 1D of EP 525, however, an LD light-emission emitted at the time of forming a space of recording data is not multi-pulsed, but is instead a single pulse.

On the other hand, newly-amended independent claim 1 of the instant application describes an advantageous combination of features that includes a write beam of the multi-pulse beam being emitted at the time of forming a mark of the data, and an erase beam of the multi-pulse beam being emitted at the time of forming a space of the data.

Accordingly, Applicants respectfully submit that claim 1 and EP 525 are particularly different from each other at least with regard to these features.

Concerning the difference between claim 1 and EP 525, the Examiner might allege that while independent claim 1's feature of an erase beam of the multi-pulse beam being emitted at the time of forming a space of the data is not disclosed in EP 525, this feature of claim 1 is

obvious over EP 525, because EP 525 discloses that an LD light-emission emitted at the time of forming a mark of recording data is multi-pulsed. If such an allegation is made by the Examiner, Applicants would respectfully traverse it for at least the following reasons.

In this regard, Applicants note that newly-amended independent claim 1 further includes a feature of the erase beam of the single-pulse beam being emitted during a predetermined period. Applicants respectfully submit that this feature of claim 1 is not disclosed in EP 525.

Accordingly, Applicants respectfully submit that claim 1 is not anticipated by EP 525, and is not obvious over EP 525.

Concerning the differences between claim 1 and EP 525, the Examiner might allege that while claim 1's feature of the erase beam of the single-pulse beam being emitted during a predetermined period is not disclosed in EP 525, this feature of claim 1 is obvious over EP 525 because EP 525 discloses that in Figs. 1F, and 1G an LD light-emission emitted at the time of forming a certain mark of recording data is a single pulse. If such an allegation is made by the Examiner, Applicants would respectfully traverse it for at least the following reasons.

In this regard, Applicants note that Figs. 1F, and 1G of EP 525 discloses that at the time of forming a mark of recording data, both of LD light-emission of single pulse and LD light-emission of multi-pulse are used. However, Applicants respectfully submit that in order to accomplish claim 1 based on EP 525 two steps of design or change of (1) using a multi-pulse at the time of forming a space, and further (2) using a single pulse during a predetermined period at the time of forming a space, are required.

Accordingly, Applicants respectfully submit that claim 1 is not anticipated by EP 525, and is not obvious over EP 525.

The remaining independent claims 3 and 10-13 have been newly-amended to include similar features as newly-amended independent claim 1. Accordingly, similar arguments as set forth above with regard to newly-amended independent claim 1 also apply to newly-amended independent claims 3 and 10-13.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. § 102(b) should be withdrawn because neither Shigemori nor EP 525 teach or suggest each feature of independent claims 1, 3 and 10-13, as amended. As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)." Furthermore, Applicant respectfully asserts that the dependent claims are allowable at least because of their dependence from newly-amended independent claim 1 or 3, and the reasons set forth above.

The newly-added claims 14-17 are presented to differently describe embodiments of the disclosure of the instant application and to afford the Applicants with claim scope to which they are entitled. The features of newly-added dependent claim 14 are based on the disclosure in the instant application, for example, in Fig. 2A and the related portions of the specification. The features of newly-added dependent claim 15 are based on the disclosure in the instant application, for example, at page 28, line 24 – page 29, line 2 and page 29, lines 19-22 of the specification. The features of newly-added dependent claim 16 are based on the disclosure in the instant application, for example, at page 29, line 23 – page 30, line 4 of the specification. The

features of newly-added dependent claim 17 are based on the disclosure in the instant application, for example, at page 29, lines 11-18 of the specification.

CONCLUSION

In view of the foregoing, Applicants submit that the pending claims are in condition for allowance, and respectfully request withdrawal of all outstanding rejections and timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution. A favorable action is awaited.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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Dated: February 1, 2007 By: _____

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